Zero Risk

Dave Lochbaum May 2022

Zero Risk certainly has its benefits.

But just how useful is Zero Risk as a public health and safety standard?

According to the U.S. Department of Transportation's National Highway Safety Administration, 42,915 people died in motor vehicle traffic accidents in 2021, an increase of 10.5% over the 38,824 traffic deaths in 2020.

A Zero Risk standard finds tens of thousands of traffic deaths annually unacceptable.



Implementation of a Zero Risk standard would drop both speed limits and traffic deaths to zero.





According to Bay Area Bicycle Law, 623 to 871 persons died annually between 2007 and 2019 in bicycle accidents.

Implementation of a Zero Risk standard would make riding deadly bicycles illegal or require all bicycles to be dumped to the deepest part of the largest ocean.

According to the Centers for Disease Control and Prevention, an average of 3,957 Americans died each year between 2010 and 2019 from drowning.

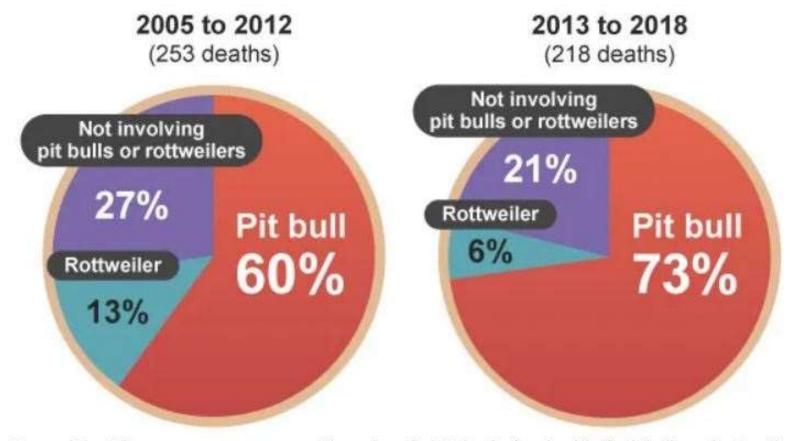






Implementation of a Zero Risk standard would ban swimming pools, bathtubs, boating, and other super dangerous water activities.

14 Years of U.S. Dog Bite Fatalities in Two Periods

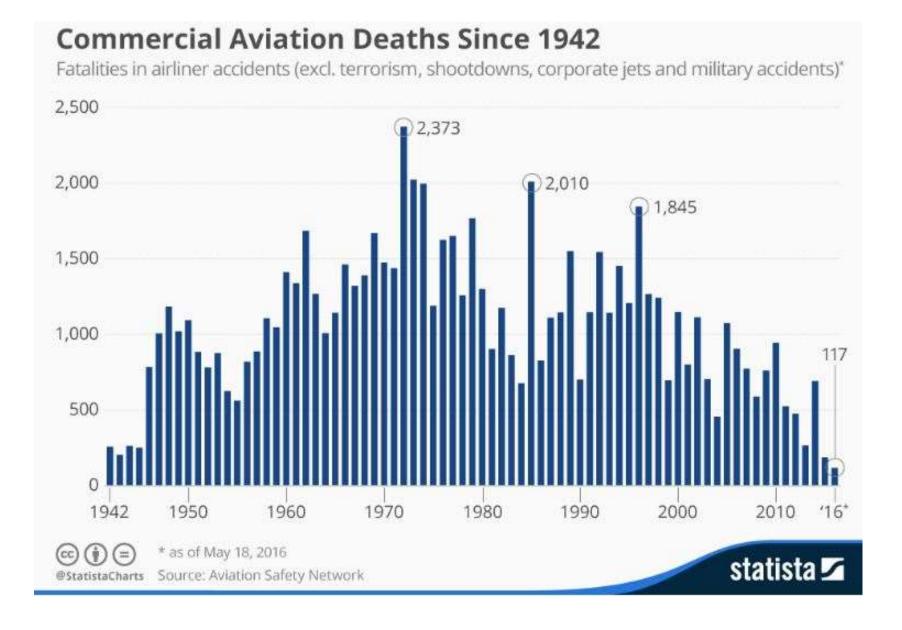


Source: DogsBite.org

*In each period, 2 deaths involved both pit bulls and rottweilers.

According to Responsible Citizens for Public Safety, 471 Americans died from dog bites between 2005 and 2018, an average of nearly four persons each month.

Implementation of a Zero Risk standard would euthanize all dogs, require all dogs to have all their teeth pulled, or require dogs to wear muzzles and take their sustenance through straws.



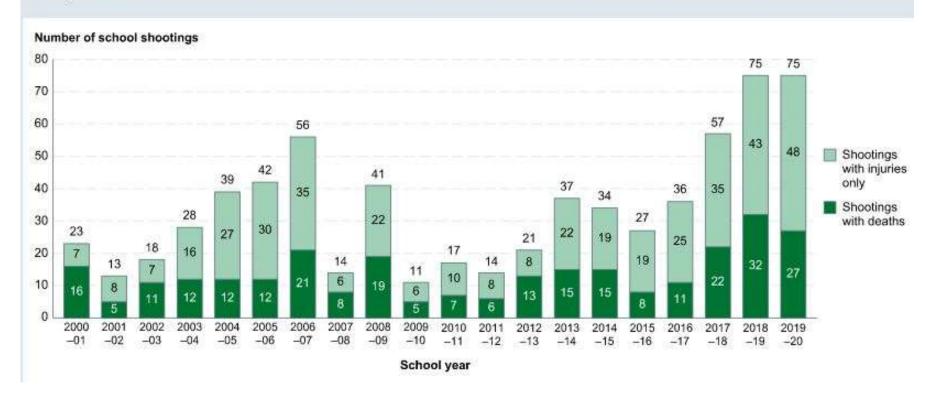
According to statista, thousands of people have died in commercial aviation accidents since 1942.

Implementation of a Zero Risk standard would permanently park all those hazardous airplanes, preventing them from ever killing another person.



Between 2000 and 2020, there were never fewer than five school shootings resulting in death(s).

Figure 3. Number of school shootings with casualties at public and private elementary and secondary schools: 2000–01 through 2019–20



Implementation of a Zero Risk standard would permanently close all public and private schools, ending forever the risk of school shootings.

According to an article by Barry P. Boden et al in the *American Journal of Sports Medicine*, an average of 12.2 youths died annually over a 20 year period from high school football injuries.

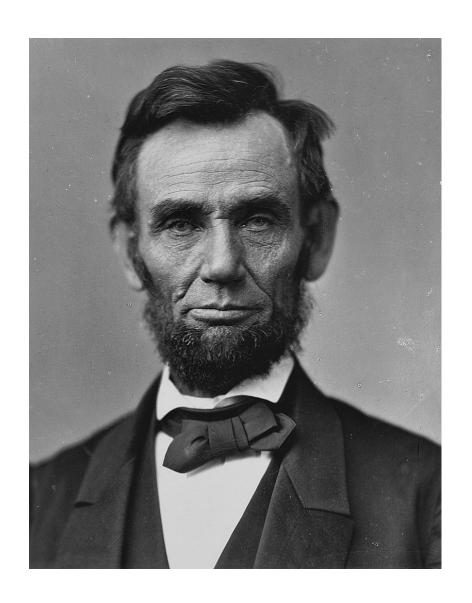
Implementation of a Zero Risk standard would permanently cease high school football programs and transfer the participants into the chess or debate clubs or safer extracurricular activities.

According to the Florida Fish & Wildlife Conservation Commission, there were 16 fatal alligator attacks between 1999 and 2019.



The American alligator was placed on the Endangered Species list in 1967.

Instead of a Zero Risk standard protecting people from alligators, alligators are protected <u>from</u> people.





More than one U.S. President has been assassinated while in office.

Implementation of a Zero Risk standard would either eliminate the position of a president or prevent the president from ever encountering a potential assassin, eat poisoned food, dive into a swimming pool, or come across a hungry alligator.

A Zero Risk standard has immense appeal and zero practicality.

A Zero Risk standard eliminates all risk, but also eliminates all benefits associated with the risky activity. Rather than a Zero Risk standard, society has adopted a "no undue risk" standard that requires measures that manage the risk to an acceptably low level.

For example:

Drivers' licenses, traffic laws, vehicle inspections, and road signs are used.

Bicyclists wear helmets.

Lifeguards, non-skid bathmats, and life preservers protect against drowning.

Leash laws keep dogs in check.

NTSB investigates incidents and FAA mandates airline safety upgrades.

School administrators and staff have taken steps to protect faculty and students from malice.

etc.

Like beauty, "no undue risk" is often in the eyes of the beholders. Some see any risk other than zero as being undue. Others tolerate a non-zero level of risk as long as it's as close to zero as practical.

The Short List can distinguish undue risks from tolerable risks.

Consider that the perceived risk event happens. If the list of things undertaken to prevent another event is long, the risk is likely higher than necessary, or undue.

But if the list is short or empty, the risk is being reasonably managed.

Zero Risk Zero Use